



Preclinical Drug Testing Application Guidelines

1. Purpose

The goal of the IFOPA Preclinical Drug Testing Program is to accelerate the discovery of novel therapies for FOP. This program is being offered to the FOP research community as a means to lower the costs and barriers of evaluating promising therapeutic agents in *in-vivo* models of the disease.

By offering this free testing service through a competitive review process, the FOP community will be able to rapidly evaluate therapeutic ideas in *in-vivo* FOP models without the time or expense of acquiring, expanding and maintaining mice colonies. Centralizing preclinical testing also allows for results to be standardized and compared across compounds, thereby enabling the identification of those agents that have the highest likelihood of *in-vivo* effects in patients.

2. General Information

These application instructions are for those who wish to test potential therapeutic drugs in the IFOPA Preclinical Drug Testing Program. Individuals or groups who wish to propose more than one intervention for consideration are encouraged, but should submit separate applications for each proposed intervention.

3. Eligibility

The IFOPA Preclinical Drug Testing Program is open to submissions from:

- Researchers at academic medical centers or universities worldwide
- Biotech or pharmaceutical companies with commercial interest in FOP
- Members of the FOP community (e.g. people with FOP, their family members and friends)

Nominated therapeutic compounds should be supported by compelling scientific rationale for preclinical testing, and may include:

- Drugs, compounds or dietary supplement formulations that are currently marketed for other indications (i.e. repurposed drugs)
- Investigational drugs/new chemical entities
- Combinations of drugs that have different mechanisms of action and/or different disease targets
- Analogs of existing drugs which may have an improved efficacy or safety profile
- Over-the-counter (OTC) medicines that have strong scientific rationale for testing in FOP

All proposed compounds need to be readily available (through purchase or directly supplied) to the Mayo Clinic research team.

4. Proposal Content

Submitted proposals (English only) should be in Microsoft Word format or PDF, and should include the following sections, in order:

Title of Proposal: The title of the proposal is typically the name of the compound being tested (e.g., "Selenium-Conjugated Carboxyfullerenes").

Applicant's Contact Information: This information includes the name, company (if applicable), address, telephone and email of the individual submitting the application.

Background Information & Rationale (page limit of 2 pages): This section should describe concisely the reason(s) why the compound warrants testing for potential effects on FOP lesion formation. The background information should include:

- Scientific rationale; and/or
- Existing data in mice, cells or humans if available; and/or
- Other justifications.

If this section includes unpublished data, include enough information (i.e. figures, tables, protocols) to permit its evaluation. If the section includes published data, include similar information and a reference citation to the publication(s) from which the data are derived.

Suggested Treatment Protocol (page limit of 1 page): This section should provide a detailed description of the compound being tested and a proposed testing protocol. The following should be addressed, where applicable:

- Whether the compound can be obtained commercially or whether the compound needs to be supplied by the applicant. If the compound can be obtained commercially, note whether there is a suggested supplier and the compound cost (dollars per mouse per day of treatment)
- How should the compound be delivered (e.g. intraperitoneal injection or by gavage), and at what dose
- Other considerations that need to be considered for the compound (e.g. compound shelf-life, storage conditions, PK/PD)

Animal Safety Information (page limit of 1 page): This section should describe what is known about potential harmful side effects the treatment might have on mice. If the applicant knows of any pilot data based on either short-term or long-term exposure of rodents or other mammals to the treatment, the application should state this and describe any harmful side effects noted in the previous study. If the applicant knows of toxicity data related to other doses of the compound or to related compounds, this should be summarized for evaluation by an institutional animal use committee.

5. Testing Costs

For non-commercial parties, the IFOPA supports all associated costs for testing the drugs, compounds or dietary supplement formulations that are accepted into the Preclinical Drug Testing Program. The program also includes a limited budget to cover the purchase of the nominated drug to be tested. If

the drug/compound makes use of materials that are not yet available and/or whose production depends on proprietary or unpublished methods, or is prohibitively expensive, these materials will need to be provided to Mayo Clinic investigators, at the submitter's expense.

For commercial entities looking to test their compounds in the IFOPA's Preclinical Drug Testing Program, it is asked that the submitting company pay for the testing and provide the investigational drug.

6. Proposal Submission

Proposals for the IFOPA Preclinical Drug Testing Program need to be completed and submitted by the dates referenced below. Individuals or groups who wish to nominate more than one compound for consideration may do so, however separate applications forms should be submitted for each proposed intervention.

Therapeutic target nominations may be submitted, however evaluations will be grouped and evaluated by the Preclinical Drug Testing Review Committee twice per year according to the following schedule:

- Submissions received between **December 1 - May 31** will be evaluated by July 15.
- Submissions received between **June 1 - November 30** will be evaluated by January 31.

Completed applications should be sent to preclinicaltesting@ifopa.org.

7. Statement of Understanding

All applicants will be required to accept the following Statement of Understanding at the time of submitting the Preclinical Drug Testing application.

- ✓ I understand all information presented in the proposal will be freely shared with members of the IFOPA, Mayo Clinic investigators, and the Preclinical Drug Testing Program Review Committee during their evaluation of proposals, but will otherwise be considered confidential.
- ✓ If my proposal, or a modification of it (such as altered dosage or frequency of administration), is accepted for inclusion in a research protocol, I may be asked to help evaluate the data and to prepare the data for written and/or oral publications. I also agree that the Mayo Clinic investigators will serve as co-authors on any publications, and share responsibility for assignment of authorship and timely publication.
- ✓ I understand the IFOPA intends to post the results of all supported studies on its website, irrespective of whether the results are positive or negative (timing may be negotiated and your institution/company may be blinded upon request).
- ✓ I understand data generated by IFOPA-supported experiments using the nominated drug compound may be used in applications for further research support by anyone (unless compounds are proprietary to a company or lab).
- ✓ I understand that I will be free to use IFOPA-generated data in the context of applications for research support or for any other purpose.
- ✓ For applicants that make use of materials that are not yet freely available and whose production depends on proprietary or unpublished methods:

If my application is approved for incorporation in the IFOPA Preclinical Drug Testing Program, a mutually acceptable Materials Transfer Agreement will be developed with the parties, which would permit me to provide the Mayo Clinic with the compound(s) needed for the experimentation.

8. CONTACT

Questions about the program or the application process should be sent to Adam Sherman and Dr. Robert Pignolo at preclinicaltesting@ifopa.org.